

10/578602

AP20 Rec'd PCT/PTO 08 MAY 2006

IN THE UNITED STATES PATENT & TRADEMARK OFFICE

Applicant: Steffen Hardt
International Application No.: PCT/EP2004/012650
International Filing Date: 09 November 2004
For: METHOD FOR SEPARATING CHEMICAL
SUBSTANCES AND/OR PARTICLES, DEVICE AND
USE THEREOF
Date: May 8, 2006

Mail Stop PCT
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT

Sir:

This invention relates to electric fields applied parallel to and/or vertical to the interfaces on adjacent microfluid lamellae made of nonmiscible media containing said biomolecules and bioparticles to which they have different physico-chemical affinities in order to separate biomolecules and bioparticles and the biomolecules and bioparticles are electrophoretically separated.

As authorized and encouraged under 37 C.F.R. §1.97-1.99, applicant hereby cites as a means of complying with the duty of disclosure set forth in 37 C.F.R. §1.56, the following patents and/or documents, required copies enclosed, which the Examiner should consider with respect to the above-identified United States Patent Application:

FOREIGN DOCUMENTS		
PATENT/DOCUMENT NO.	DATE	COUNTRY
37 42 292	06/01/1989	DE
00/22428	04/20/2000	WIPO
199 30 253	12/28/2000	DE
694 27 690	05/02/2002	DE
100 63 096	09/12/2002	DE
101 13 257	11/14/2002	DE
03/066191	08/14/2003	WIPO
1 353 172	10/15/2003	EP
OTHER PRIOR ART/ARTICLE		
C.W. Theos et al., <i>Electroextraction Two-Phase Electrophoresis, Applied Biochemistry and Biotechnology</i> , Vol. 54, (1995), pp. 143-157.		
S. Devasenathipathy, et al., <i>Electrokinetic Particle Separation</i> , 7 th International Conference on Miniaturized Chemical Biochemical Analysis Systems, October 5-9, 2003, pp. 845-848.		
T. Herweck, et al., <i>Visualization of Flow Patterns and Chemical Synthesis in Transparent Micromixers</i> , Microreaction Technology, Proceedings of the Fifth International Conference on Microreaction Technology, 2001, pp.215-229.		
V. Reddy, et al., <i>Organic/Aqueous Two Phase Microflow for Biological Sample Preparation</i> , 7 th International Conference on Miniaturized Chemical and Biochemical Analysis Systems, October 5-9, 2003, pp. 437-440.		
C.-L. Liu, et al., <i>Partitioning of Proteins Using Two-Phase Aqueous Surfactant Systems</i> , AIChE Journal, April 1995, Vol. 41, No. 4, pp.991-995.		
V.G. Gaikar, et al., <i>The Effect of Surface Active Additives on the Partitioning of Proteins and Enzymes in Aqueous Two-Phase Systems</i> , J. Chem. Tech. Biotechnol., 1996, Vol. 67, pp. 329-332.		
D. Raymond, et al., <i>Continuous Sample Pretreatment Using a Free-Flow Electrophoresis Device Integrated onto a Silicon Chip</i> , Analytical Chemistry, 1994, Vol. 66, No. 18, pp. 2858-2864, XP-000478030.		
F. Hachem, et al., <i>Hydrophobic Partitioning of Proteins in Aqueous Two-Phase Systems</i> , Enzyme and Microbial Technology, Vol. 19, 1996, pp. 507-517, XP-002316648.		

10/578602

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In accordance with 37 CFR 1.98(a)(2)(i) only the foreign and non-patent documents are required for the express purpose of providing the Patent and Trademark Office with an ample opportunity to evaluate the same and to arrive at an independent assessment of its materiality, if any, with regard to the examination of the application.

An examination of the present application considering the above documents is requested.

Respectfully submitted,

HUDAK, SHUNK & FARINE CO. LPA


Daniel J. Hudak, Jr.
Registration No. 47,669

DJHjr/lb
2020 Front Street
Suite 307
Cuyahoga Falls, OH 44221-3257
(330) 535-2220
Attorney Docket No.: FMW-CP-PCT-US

AP20 Rec'd PCT/PTO 08 MAY 2006

Sheet 1 of 3

Form PTO-1449		U.S. Department of Commerce Patent and Trademark Office		Atty. Docket No.: FMW-CP-PCT-US		Serial No. 10578602	
LIST OF PRIOR ART CITED BY APPLICANT (Use several sheets if necessary)				Applicant: Steffen Hardt			
				Filing Date: May 8, 2006		Group:	

U.S. PATENT DOCUMENTS							
Examiner Initial		Document Number	Date	Name	Class	Subclass	Filing date if appropriate
	AA						
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	AO	694 27 690	05/02/2002	DE			
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AR		C.W. Theos et al., <i>Electroextraction Two-Phase Electrophoresis, Applied Biochemistry and Biotechnology</i> , Vol. 54, (1995), pp. 143-157.	
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EXAMINER	/Jennifer Dieterle/	DATE CONSIDERED	06/14/2010
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*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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Sheet 2 of 3

Form PTO-1449 U.S. Department of Commerce Patent and Trademark Office		Atty. Docket No.: FMW-CP-PCT-US		Serial No.: 20/578602	
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Sheet 3 of 3

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